



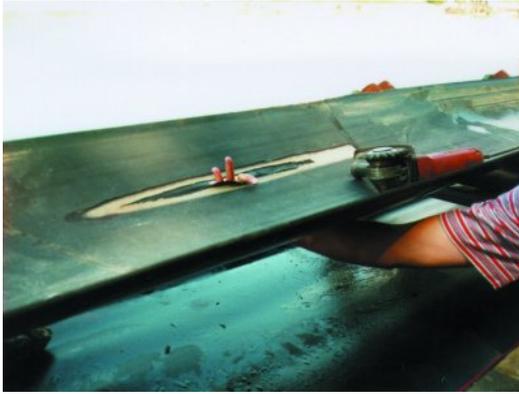
UniquePolymerSystems.com

The Engineer's Choice

... for Solutions

ADVANCED POLYMER SURFACE ENGINEERING TECHNOLOGY

Unique Polymer Systems - '80' DUROMETER Brushing Elastomer



UPS '80 DUROMETER Fluid Elastomer' is a 80 Durometer high performance brushing grade elastomeric which has been specifically developed for brush repair of rubber components and is suitable for use on impellers, chutes, hoppers valves, rollers, gaskets, cables, hoses etc.

UPS '80 DUROMETER Brushing Elastomer' is based on a complex blend of polyols and polyesters in combination with amine catalysts and activators to produce a cold vulcanising

product with outstanding mechanical strength.

The properties of **UPS '80 DUROMETER Brushing Elastomer'** have been designed to match factory produced rubbers.

Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.

SURFACE PREPARATION

All existing dirt, oil and grease should be removed and the surface wiped with **UPS 'Cleaner'**. Any areas of frayed or fragmented rubber should be cut away to provide a sound repair area.

Smooth surfaces including metals, should be mechanically etched to produce a good profile, with abrasive blasting being preferred for metal substrates. Rubber surfaces are best roughened using a stiff wire brush / comb.

All loose dust and particles must be removed and the surface given a final wipe with **UPS 'Cleaner'**.

On certain repairs such as gaskets and castings where one surface is not required to bond to the **UPS '80 Durometer Brushing Elastomer'**, these surfaces should be treated with **UPS Release 'Agent'**.

PRIMING

All areas to be repaired or resurfaced should be first primed with **UPS 'Elastomer Primer'**.

The primer should be applied with a soft bristled brush to give an even, but low coating thickness, taking care to avoid ponding of the primer.

The primer should be allowed a minimum of 60 minutes and a maximum of 8 hours at 20°C before applying the **UPS '80 DUROMETER Brushing Elastomer'**.

MIXING

UPS '80 DUROMETER Brushing Elastomer' is a two component material which must be mixed together prior to use.

The contents of the resin container should be transferred to the mixing container provided. The contents of the hardener should be added to the resin with continuous stirring to produce a streak free viscous liquid.

Where less than full unit mixes are required it is essential that the product be mixed accurately weighing out the quantities of resin and hardener.

Thorough mixing is extremely important, and once the material appears mixed, a further period of mixing should be carried out to ensure there is no unmixed material.

APPLICATION

The mixed material should be applied evenly to the primed surface with a clean brush. When a second coat is required it should be applied as soon as possible after the initial set time and within 24 hours of the first coat being applied.

All equipment must be cleaned IMMEDIATELY after use with **UPS 'Cleaner'**.

Volume Capacity

1040cc (63 cu ins) per kilo

Theoretical Coverage Rate

1.9 m²/kilo at 500 microns dft (20 ft²/kilo at 20 mils dft)

PHYSICAL CONSTANTS

Mixing Ratio	Resin	Hardener	
	1.17	1	By volume
	100	87	By weight

Appearance	Resin	Black Liquid
	Hardener	Clear Viscous Liquid

Drying & Cure times at 20°C (68°F)	Usable Life	15 minutes
	Initial Set	1 hour
	Machining	16 hours
	Full Mechanical	3 days

Volume Solids 100%

V.O.C. Nil

Shelf Life Use within 12 months of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F)

Operating Temperature

	Maximum	Continuous
Dry Heat	120°C (250°F)	80°C (176°F)
Wet Heat	80°C (175°F)	50°C (122°F)

PHYSICAL PROPERTIES

Tensile Strength 10.5N/mm² (1500 psi)
ASTM D412

Tear Strength 49N/mm (275 pli)
ASTM D624

Elongation >600%
ASTM D412

Shore A Hardness 80
ASTM D2240

Di-electric Strength 16 volts/micron (400 volts/mil)
ASTM D149

Peel Adhesion 9kg/cm (50 pli) - cohesive
(concrete and steel) failure in 80 DUROMETER
ASTM D903

HEALTH AND SAFETY

As long as normal good practice is observed UPS '80 DUROMETER Brushing Elastomer' can be safely used. Protective gloves should be worn. A fully detailed Material Safety Data Sheet is either included with the material or is available on request.

PACKAGING

Supplied in 0.600 kg packs.

FOR FURTHER INFORMATION PLEASE CONTACT

The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests.



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